



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF  
STATE PLANNING COORDINATION

August 16, 2004

Mr. Greg Scott  
Scott Engineering, Inc.  
838 Walker Road  
Dover, DE 19904

RE: PLUS review – PLUS 2004-07-12; Chestnut Grove

Dear Mr. Scott:

Thank you for meeting with State agency planners on July 28, 2004 to discuss the proposed plans for Chestnut Grove Properties to be located on County Road 158, just west of the Kenton Road.

According to the information received, you plan to develop a 201 lot residential subdivision on 50.8 acres. The land is currently zoned RM-1 and this proposal is consistent with this zoning.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as the City of Dover is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the City.

This office has received the following comments from State agencies:

**Office of State Planning Coordination – Contact: David Edgell 739-3090**

This project is located in Investment Level 2 according to the June 3 version of the 2004 State Strategies for Policies and Spending, which has been approved by the Cabinet Committee for State Planning Issues. This site is also located in City of Dover. Investment Level 2 reflects areas where growth is anticipated by local, county, and State

plans in the near term future. State investments will support growth in these areas. **Our office supports infill projects as essential to the Livable Delaware strategy of concentrating growth in and around existing communities and infrastructure.** This is the type of project that is highly desirable to allow us to meet our goals of revitalizing our already urbanized areas while protecting agricultural lands and natural resource areas from encroachment by sprawling suburban and rural development. Our office has no objections to the proposed development of this project in accordance with the relevant City of Dover codes and ordinances.

**State Historic Preservation Office (SHPO) – Contact: Anne McCleave 739-5685**

There is an old house on the subject property. It is requested that you allow SHPO to access the site in order to document the house and any other structures before they are demolished. Please contact Anne McCleave to schedule a time.

Also be aware that there is a medium to high probability for archaeological sites within the subject area.

**Department of Transportation – Contact: Bill Brockenbrough 760-2109**

Chestnut Grove Road is classified as a local road and has an existing right-of-way width of 50 feet. DelDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 30 feet from the centerline on local roads. Therefore DelDOT will require right-of-way dedication to provide the additional 5 feet from this project.

Offsite improvements, in the form of a northbound left turn lane on Kenton Road, will likely be required at the intersection of Chestnut Grove Road and Kenton Road. The developer will also be required to improve Chestnut Grove Road to meet DelDOT standard typical section for local roads (two 11-foot lanes and two 4-foot shoulders) between Kenton Road and the site entrance.

A final determination will be made in their review of the entrance plans for the project, but DelDOT anticipates requiring a right-turn deceleration lane and either a by-pass lane or a protected left-turn lane at the site entrance.

It is recommended that sidewalks be provided throughout the community to encourage walking.

It is also recommended that a multi-modal path, located in a 15-foot wide permanent easement, be required across the frontage of the site.

DelDOT recommends that some of the community open space be located to provide a break between the lots on the southwest side of the property for pedestrian access to the

wetland area along the tax ditch there. If the development rights to the land across that ditch had not been purchased, then a stub street would be recommended.

Delaware Transit Corporation (DTC) is interested in working with this development. Their Go Link transit service gives them the capability of flexing low performing fixed routes to deviate off the fixed route pathway and provide access to communities within established “flex zones”. DTC will work with the developer at the appropriate time to provide our bus stop specifications information, making sure the bus stop will be accessible and meet American with Disabilities Act standards. The person to contact for bus stop specification information and costs is the DelDOT Facility Coordinator for Kent County, Mr. Charlie Simpson, at (302) 760-2806.

The developer’s site engineer should continue to work with DelDOT’s Subdivision Manager for Kent County, Mr. George Shaw, regarding comments offsite improvement mentioned above and more generally about their requirements with regard to the design of the site entrance. Mr. Shaw may be reached at (302) 760-2261. DelDOT has noted that Mr. Shaw is retiring at the end of August. While he will be replaced, it is recommended that your site engineer document any verbal understandings that might exist regarding this project.

**The Department of Natural Resources and Environmental Control – Contact: Kevin Coyle 739-3091**

According to the soil survey update, the following soils were found in the immediate vicinity of the proposed construction and grouped on the basis of drainage class:

- Excessively well drained to well drained – Sassafras-Evesboro (15-40% slopes) complex
- Well drained – Sassafras
- Moderately well drained – Woodstown
- Poorly drained (**hydric**) – Othello
- Very poorly drained (**hydric**) –Johnston (**floodplain**)

Sassafras-Evesboro complex is a well drained to excessively well-drained upland soil that has severe limitations for development because of steep slopes. Sassafras is a well-drained upland soil with few limitations for development. Woodstown is a moderately well-drained soil of low-lying upland that has moderate limitations for development. Othello is poorly-drained wetland associated (**hydric**) soils that has severe limitations for development. Johnston is a very poorly-drained wetland associated (**hydric**) floodplain soil that has severe limitations for development.

**Wetlands**

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of Palustrine Forested wetlands along Cahoon Branch and the adjacent tax ditch.

The PLUS application indicates that wetlands will be filled for “roads and lots.” The developer and City should be aware that it can be difficult to obtain permits for such activities, unless it can be proven that there are no reasonable alternatives. Given the site layout and available uplands, there are certainly alternatives available which do not necessitate impacts to wetlands. **The delineation that has been conducted should be verified by Corps of Engineers through the Jurisdictional Determination process.**

Impacts to Palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.

To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-4691 to schedule a meeting.

It is also recommended that the Farm Services Agency of the USDA be contacted to assess whether the farmed wetlands on subject parcel meet the recognized criteria for classification as “prior converted wetlands.” Prior converted wetlands are farmed wetlands that have drained or altered before December 23, 1985, and no longer meet the wetland criteria established under the 404 program. Such wetlands are considered exempt from regulatory protection provided that there is no proof of a continuous “fallow period” of five years or greater in that parcel’s cropping history. Parcels converted after said date regardless of cropping history are considered jurisdictional by the Army Corps of Engineers (ACOE). The contact person for assessing a parcel’s cropping history is Sally Griffin at the USDA – she can be reached at 678-4182.

Lots should be removed in their entirety from both the wetland and the forest surrounding it. Vegetated buffers of no less than 100 feet should be employed from the edge of the wetland complex. The developer should note that both DNREC and Army Corps of Engineers discourage allowing lot lines to contain wetlands to minimize potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners.

## **TMDLs**

Although Total Maximum Daily Loads (TMDLs) as a “pollution runoff mitigation strategy” to reduce nutrient loading have not yet been developed for most of the tributaries or subwatersheds of the Delaware Bay watershed to date, work is continuing on their development. TMDLs for the St. Jones subwatershed, of which this parcel is part, are scheduled for completion in December 2006.

Therefore, until the specified TMDL reductions and pollution control strategies are adopted, it shall be incumbent upon the developer to employ best available technologies (BATs) and/or best management practices (BMPs) as “methodological mitigative strategies” to reduce degradative impacts associated with development.

### **Water Supply**

The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be constructed and located in compliance with all requirements of the Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any well(s).

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-3665.

### **Stormwater Management**

**Source** - Delaware Sediment and Stormwater Regulations

#### **Requirements:**

1. Land disturbing activities in excess of 5,000 square feet are regulated under the Delaware Sediment and Stormwater Regulations. A detailed sediment and stormwater management plan must be reviewed and approved by our office prior to any land disturbing activity (i.e. clearing, grubbing, filling, grading, etc.) taking place.
2. The review fee and a completed Application for a Detailed Plan are due at the time of plan submittal to our office. Construction inspection fees based on developed area and stormwater facility maintenance inspection fees based on the number of stormwater facilities are due prior to the start of construction. Please refer to the fee schedule for those amounts.
3. The following notes must appear on the record plan:

- The Kent Conservation District reserves the right to enter private property for purposes of periodic site inspection.
  - The Kent Conservation District reserves the right to add, modify, or delete any erosion or sediment control measure, as it deems necessary.
  - A clear statement of defined maintenance responsibility for stormwater management facilities must be provided on the Record Plan.
4. Ease of maintenance must be considered as a site design component and a maintenance set aside area for disposal of sediments removed from the basins during the course of regular maintenance must be shown on the Record Plan for the subdivision.
  5. All drainage ways and storm drain should be contained within drainage easements and clearly shown on the plan to be recorded by the City of Dover.
  6. The East Dover Tax Ditch borders the western side of the project and has construction and maintenance right-of-ways associated with it. Those right-of-ways are 50 feet from ditch center line and must be shown on the plans to be recorded. Please contact Gene Vanderwende at the Kent Conservation District with any questions regarding the Tax Ditch.
  7. A soils investigation supporting the stormwater management facility design is required to determine impacts of the seasonal high groundwater level and soils for any basin design.

**Comments:**

1. The eastern side of this site contains Othello (Ot), Woodstown (Ws), Johnston (Jo) and Fallsington (Fs) soils based on the Soil Survey for Kent County prepared by the USDA Natural Resource Conservation Service. The Othello, Johnston and Fallsington soil series consists of poorly or very poorly drained, slowly permeable silty soil and have severe limitations for most community development and recreational uses such as: basements, roads, lawns, and site septic tank disposal fields. Fallsington Loam is naturally poorly drained and has limitations to community development which may be overcome with careful planning and design if properly drained.
2. Proper drainage of all developed lots and active open space must be considered in the development of the grading plan for this subdivision due to the presence of poorly drained soils on the site.
3. The preferred methods of stormwater management are those practices that maximize the use of the natural features of a site, promote recharge and minimize the reliance on structural components. The designer is encouraged to consider the conservation design approach and limit the amount of tree clearing required for

the development.

4. Access to the proposed stormwater facility must be provided for periodic maintenance. This access should be at least 12 feet wide to leading to the facility and around the facility's perimeter.
5. It is recommended that the stormwater management areas be incorporated into the overall landscape plan to enhance water quality and to make the stormwater facility an attractive community amenity.
6. Based on the site characteristics, a pre-application meeting is suggested to discuss stormwater management and drainage for this site.

### **Drainage**

The proposed project is in the East Dover Hundred Tax Ditch. Coordination for future maintenance is essential and the Drainage Section requests the developer and or engineer contact the East Dover Hundred Tax Ditch to ensure adequate access to the existing right-of-way is established.

Beaver have caused drainage problems in the area on Cahoon Branch. The Drainage Section requests the branch be investigated and cleared of any beaver dams before construction begins. Please contact the Wildlife Section at 739-5297 for additional information and assistance.

The Drainage Section does ask that all precautions be taken to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of on site storm water. Precautions should be taken to ensure the project does not hinder any off site drainage of the Westfield Subdivision as well as existing homes along Chestnut Grove Road.

The Drainage Section recommends the existing field ditch on the property be open space and not owned by the individual landowners. If the existing ditch is filled and lots are allowed to be sold as shown on the current plan, a statement should be placed on the deed that the property has a filled ditch/swale and future drainage problems are very likely.

### **Habitat**

As the design phase of this project moves forward, Natural Heritage program strongly encourages the landowner(s) to consider preservation of upland, riparian, and wetland forests on these parcels. Forests provide environmental services that benefit humans directly such as water quality protection (erosion control and sediment, nutrient, biological and toxics removal), climate moderation, aesthetic value and recreational

opportunities. In addition, forests provide habitat for many species of plants and animals. Forest fragmentation resulting from development separates wildlife populations, increases road mortality, and increases “edge effects” that leave many forest dwelling species, particularly songbirds, vulnerable to predation. They would gladly assist the landowner(s) in evaluating these parcels for wildlife habitat. Many new incentive-based programs for wildlife management are available to private landowners through the Natural Heritage agency. Please contact the Natural Heritage program at (302)653-2880 if the landowner(s) is interested in more information.

Any lands set aside for conservation purposes should be placed into a permanent conservation easement or other binding protection mechanism. These areas should be clearly marked and delineated so that residents understand their importance and so that homeowner activities do not infringe upon these areas.

### **Revegetation**

For this project, it is requested that no invasive species be used in the revegetation of disturbed areas. A list of species considered invasive in Delaware can be found on the DNHP web site, <[www.dnrec.state.de.us/fw/invasive.htm](http://www.dnrec.state.de.us/fw/invasive.htm)>. It is recommended that you use native plants and DNHP Botanist, Bill McAvoy can be contacted at (302) 653-2880 to assist you in developing a plant list.

### **Recreation**

It is recommended that sidewalks be built fronting every residence and stub streets. A complete system of sidewalks will: 1) fulfill the recreation need for walking and biking facilities 2) provide opportunities for neighbors to interact in the community and 3) facilitate safe, convenient off-road access to neighboring communities, public mass transit stops, schools, stores, work etc.

The Division of Parks and Recreation conducted a telephone survey of Delaware residents to gather information on outdoor recreation patterns and preferences as well as other information on their landscape perception. These findings are the foundation of the 2003-2008 Statewide Comprehensive Outdoor Recreation Plan (SCORP) providing guidance for investments in needed outdoor recreation facilities. The high and moderate facility needs in Kent County are listed below. Consideration should be given to incorporate some of these recreation opportunities into the project.

#### High Priorities

Walking or Jogging Paths

Bike Paths

Swimming Pools

#### Moderate Priorities

Skate Facilities

Hiking Trails

Baseball/Softball Fields



Picnic Areas	Campgrounds
Playgrounds	Soccer Fields
Fishing Areas	Volleyball Courts
	Basketball Courts
	Canoe/Kayak Access

## **Open Space**

In areas set aside for passive open space, the developer is encouraged to consider establishment of additional forested areas or meadow-type grasses. Once established, these ecosystems provide increased water infiltration into groundwater, decreased run-off into surface water, air quality improvements, and require much less maintenance than traditional turf grass, an important consideration if a homeowners association will take over responsibility for maintenance of community open spaces.

Open space containing forest and/or wetlands should be placed into a permanent conservation easement or other permanent protection mechanism. Conservation areas should also be demarked to avoid infringement by homeowners.

## **Air Quality**

Air pollution threatens the health of human beings and other living things on our planet. While often invisible, pollutants in the air create smog and acid rain, cause cancer or other serious health effects, diminish the protective ozone layer in the upper atmosphere, and contribute to the potential for world climate change. Breathing polluted air can have numerous effects on human health, including respiratory problems, hospitalization for heart or lung disease, and even premature death. Some can also have effects on aquatic life, vegetation, and animals.

Once complete, vehicle emissions associated with this project will be 15.4 tons (30,851.4 pounds) per year of VOC (volatile organic compounds), 12.8 tons (25,542.9 pounds) per year of NOx (nitrogen oxides), 9.4 tons (18,846 pounds) per year of SO2 (sulfur dioxide), 0.8 ton (1,677.6 pounds) per year of fine particulates and 1,290.3 tons (~2.5 million pounds) per year of CO2 (carbon dioxide)

Emissions from electrical power generation associated with this project will be 2.5 tons (4,931.8 pounds) per year of NOx (nitrogen oxides), 8.6 tons (17,154.1 pounds) per year of SO2 (sulfur dioxide) and 1,265.1 tons (~2.5 million pounds) per year of CO2 (carbon dioxide).

Emissions from area sources\* associated with this project will be 6.2 tons (12,443.8 pounds) per year of VOC (volatile organic compounds), 0.7 ton (1,369.2 pounds) per year of NO<sub>x</sub> (nitrogen oxides), 0.6 ton (1,136.2 pounds) per year of SO<sub>2</sub> (sulfur dioxide) 0.7 ton (1,466.3 pounds) per year of fine particulates and 25.2 tons (50,444.3 pounds) per year of CO<sub>2</sub> (carbon dioxide)

	VOC	NO <sub>x</sub>	SO <sub>2</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>
Mobile	15.4	12.8	9.4	0.8	1290.3
Residential	6.2	0.7	0.6	0.7	25.2
Electrical Power		2.5	8.6		1265.1
<b>TOTAL</b>	<b>21.6</b>	<b>16.0</b>	<b>18.6</b>	<b>1.5</b>	<b>2580.6</b>

The Department of Natural Resources and Environmental Control is asking that local jurisdictions consider mitigation to help resolve this issue. Mitigation might involve limiting large new developments to growth zones, focusing development to urban areas capable of providing mass transit services, requiring more energy efficient homes which would lessen air quality impacts, and promoting walkability and bikability within and between developments and town centers.

With that said this State notes that this proposed development is within a growth area and is within the City of Dover. Therefore, the State would ask that you consider the development of energy efficient homes and interconnectivity with the Town and surrounding commercial areas to promote walkability and bikeability.

### **Underground Storage Tanks**

There is one inactive LUST site located near the proposed project:

Voshell Brothers Welding, Facility # 1-000092, Project # K9405109

No environmental impact is expected from the above inactive/active LUST site(s). However, should any underground storage tank or petroleum contaminated soil be discovered during construction, the Tank Management Branch must be notified as soon as possible. It is not anticipated that any construction specifications would be need to be changed due to petroleum contamination. However, should any unanticipated contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel in the contaminated areas.

**Department of Agriculture - Contact: Mark Davis 739-4811**

The Chestnut Grove Subdivision borders the 96 ac. Massey-Draper permanently preserved agricultural preservation district. As such both the 50 foot setback and the 300 foot notification zone directives of the Delaware statute apply.

If a proposed new subdivision borders or is near an agricultural preservation district, then the owner of the preservation district is entitled to the following use protections, quoted from the Delaware Code:

**§ 910. Agricultural use protections.**

(a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:

(1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

*"This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."*

(2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.

(b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an Agricultural Preservation District, such owner, upon prevailing in any such action, shall

be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees. (*68 Del. Laws, c. 118, § 2.*)

In addition, a forest buffer should be maintained for those pre-existing residential properties and along all streams, wetlands, and river that border the proposed subdivision.

The developer should consider a diverse landscape plan that uses Delaware native tree and shrub species and encourages the “Right Tree for the Right Place” concept.

**Public Service Commission - Contact: Malak Michael or Andrea Maucher 739-4247**

The project information sheets state that City of Dover will be used to provide water for the proposed project. Records indicate that the project is located within the public water service area granted to Tidewater Utilities under Certificate of Public Convenience and Necessity number PSC-1190. As this property has been annexed into the City of Dover, the issue will need to be worked out between the City and Tidewater, if this has not already been done. It is suggested that you contact the City regarding this matter.

Any expansion of Natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines.

**Delaware State Housing Authority – Contact Karen Horton 739-4263**

This proposal is to develop 201 owner-occupied units, on a 50.8-acre parcel within the City of Dover. The units will be comprised of duplexes, townhouses, and condominiums and will have close proximity to markets and services. According to the applicant, these units will start at \$150,000 – which appears high for the market that high-density units, such as these, typically serve. The DSHA encourages the applicant to consider including prices that are affordable to moderate-income households as well. The provision of these units will help address the need for affordable homeownership that was identified in the 2003 Statewide Housing Needs Assessment.

**Delaware Emergency Management – Contact Don Knox 659-3362**

A significant impact to public safety is foreseen by implementation of this project due to the number of units proposed. The developer should notify the police, fire service, and emergency medical response organization serving the City of Dover to keep them apprised of all development activities.

Portions of this property are in the 1% and 2% annual chance flood zone. Routes 13 and 8 are both coastal storm evacuation routes and this development will add to the traffic volume on these routes during a coastal storm event.

**Department of Education – Contact Nick Vacirca 739-4658**

201 Single family units could generate and estimated 151 additional students to the Capital School District.

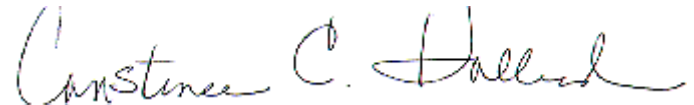
Kent County does not have school concurrence legislation at this time; however, it is recommended that the developer submit a package to the school district for informational purposes.

If the development is approved and build, please use the following information for school transportation planning. If there are homes more than 1/2 mile from the nearest public road (outside the development), developers should plan wide enough streets so that large school buses can access and turn around (without backing) from the furthest areas within the development while picking up and dropping off students. Should there not be any sites more than 1/2 mile from the nearest public road, provisions for appropriate pick-up and drop-off at the development entrance should be included. The developer should work closely with the school district transportation supervisor.

**Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.**

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in blue ink that reads "Constance C. Holland". The signature is fluid and cursive, with the first name "Constance" being the most prominent part.

Constance C. Holland, AICP

Director

CC: City of Dover